### (19) World Intellectual Property Organization

International Bureau



## 

## (43) International Publication Date 26 May 2005 (26.05.2005)

### **PCT**

# (10) International Publication Number WO 2005/047006 A1

(51) International Patent Classification7: B41J 3/54, 3/407

(21) International Application Number:

PCT/IT2004/000632

(22) International Filing Date:

16 November 2004 (16.11.2004)

(25) Filing Language:

**English** 

(26) Publication Language:

English

(30) Priority Data: TO2003 A 000909

17 November 2003 (17.11.2003) IT

- (71) Applicant (for all designated States except US): TELE-COM ITALIA S.p.A. [IT/IT]; Piazza degli Affari, 2, I-20123 Milano (IT).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): SCARTON, Gianrico [IT/IT]; c/o Olivetti Tecnost S.P.A., Via Jervis 77, I-10015 Ivrea (IT).
- (74) Agents: GIANNESI, Pier Giovanni et al.; PIRELLI & C. S.p.A., Viale Sarca, 222, I-20126 Milano (IT).

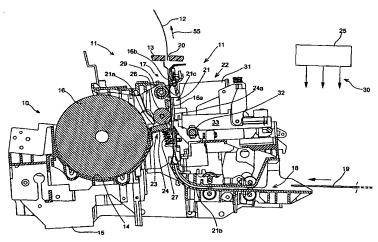
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,

[Continued on next page]

(54) Title: DEVICE FOR PRINTING RECEIPTS USING TWO PRINTING UNITS, PARTICULARLY ON THERMAL PAPER, AND RELATIVE PRINTING METHOD



(57) Abstract: A printing device (11) for printing receipts (12), each bearing constant data (41a) that render the receipt (12) identifiable, and variable data (41b), indicating the operations to be documented on the receipt in question, comprising: a roll (16) of thermal paper suitable for feeding a continuous ribbon (16a) of thermal paper a first ink jet printhead (22), and a second thermal printhead (23), in which the first ink jet printhead (22) is provided for printing on the thermal paper ribbon (16a) the constant data (41a) due to figure on a new receipt (12), independently from and prior to the relative variable data (41b) becoming available, and in which the second thermal printhead (23) is provided for subsequently printing the variable data (41b), once available, so as to complete printing of the new receipt (12). The printing device is particularly useful, making the printing and issue of a receipt faster, after the relative variable data have been input, thereby reducing waiting time for the user that the receipt is to be issued for.



005/047006 41

### WO 2005/047006 A1

JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

of inventorship (Rule 4.17(iv)) for US only

#### Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.